

AMENDMENTS TO THE CLAIMS

Please make the following amendments to the claims:

1-45. (Cancelled)

46. (Currently Amended) A process for the preparation of urethane resins comprising the steps of

providing a compound(a) having a hydrolyzable group selected from the group consisting of alkoxy and acetoxy groups directly bonded to 1 to 10 silicon atoms and having an organic group(I) selected from the group consisting of primary amino, secondary amino and acryloyl groups;

providing a compound(b), wherein compound (b) is selected from one of: acrylate, acryloylsilane compounds, monomaleimide, and maleic anhydride, wherein compound (b) being capable of reacting with said organic group(I) of compound (a);

reacting a compound(a) with such an amount of a compound (b) as to produce a product(A) having said hydrolyzable group directly bonded to 1 to 10 silicon atoms, wherein the product (A) has a secondary amino group in one molecule, the number of secondary amino groups in one molecule being less than two;

providing a polyisocyanate compound (compound(d));

providing a compound selected from the group consisting of: a polyol compound (compound(c)), a polythiol compound (compound(c-1)), and a compound (product(C)) having a number average molecular weight of 100-25000 and having at least 0.2 terminal secondary amino groups in one molecule, wherein said product(C) is obtained by reacting a compound(e) having an organic group(II) having a number average molecular weight of 100-25000 selected

from the group consisting of amino and acryloyl groups, with a compound(f) being capable of reacting with said organic group(II) to form a secondary amine compound;

reacting the polyisocyanate compound (compound(d)), with the compound selected from the group consisting of: a polyol compound (compound(c)), a polythiol compound (compound(c-1)), and a compound (product(C)), in order to produce a (thio)urethane pre-polymer (product(B)), wherein the product (B) has a terminal isocyanate group, the content of which is in an amount of 4 % or less by weight of said product(B); and

reacting said product(A) with said product(B) in such a proportion ~~the proportions of at least 0.5 equivalent of said product(A) per free isocyanate group of said product(B)~~ to produce a urethane resin having no isocyanate group.

47. (Cancelled)

48. (Currently Amended) ~~The A~~ process for the preparation of urethane resins ~~according to claim 46, comprising the steps of:~~

providing a compound(a) having a hydrolyzable group selected from the group consisting of alkoxy and acetoxy groups directly bonded to 1 to 10 silicon atoms and having an organic group(I) selected from the group consisting of primary amino, secondary amino and acryloyl groups;

providing a compound(b), wherein compound (b) is selected from one of: acrylate, acryloylsilane compounds, monomaleimide, and maleic anhydride, wherein compound (b) being capable of reacting with said organic group(I) of compound (a);

reacting a compound(a) with such an amount of a compound (b) as to produce a product(A) having said hydrolyzable group directly bonded to 1 to 10 silicon atoms, wherein the

product (A) has a secondary amino group in one molecule, the number of secondary amino groups in one molecule being less than two;

providing a polyisocyanate compound (compound(d));

providing a compound selected from the group consisting of: a polyol compound (compound(c)), a polythiol compound (compound(c-1)), and a compound (product(C)) having a number average molecular weight of 100-25000 and having at least 0.2 terminal secondary amino groups in one molecule, wherein said product(C) is obtained by reacting a compound(e) having an organic group(II) having a number average molecular weight of 100-25000 selected from the group consisting of amino and acryloyl groups, with a compound(f) being capable of reacting with said organic group(II) to form a secondary amine compound;

reacting the polyisocyanate compound (compound(d)), with the compound selected from the group consisting of: a polyol compound (compound(c)), a polythiol compound (compound(c-1)), and a compound (product(C)), in order to produce a (thio)urethane pre-polymer (product(B)) having a terminal isocyanate group, the content of which is in an amount of 4 % or less by weight of said product(B); and

reacting said product(A) with said product(B) in such a proportion to produce a urethane resin having no isocyanate group,

wherein said compound(a) is a compound(a-2), wherein said compound(a-2) has at least two primary or secondary amino groups or has at least one primary amino group and secondary amino group as said organic group(I).

49-62. (Cancelled)

63. (Currently Amended) ~~The A~~ process for the preparation of urethane resins according to claim 46, comprising the steps of:

providing a compound(a) having a hydrolyzable group selected from the group consisting of alkoxy and acetoxy groups directly bonded to 1 to 10 silicon atoms and having an organic group(I) selected from the group consisting of primary amino, secondary amino and acryloyl groups;

providing a compound(b), wherein compound (b) is selected from one of: acrylate, acryloylsilane compounds, monomaleimide, and maleic anhydride, wherein compound (b) being capable of reacting with said organic group(I) of compound (a);

reacting a compound(a) with such an amount of a compound (b) as to produce a product(A) having said hydrolyzable group directly bonded to 1 to 10 silicon atoms, wherein the product (A) has a secondary amino group in one molecule, the number of secondary amino groups in one molecule being less than two;

providing a polyisocyanate compound (compound(d));

providing a compound selected from the group consisting of: a polyol compound (compound(c)), a polythiol compound (compound(c-1)), and a compound (product(C)) having a number average molecular weight of 100-25000 and having at least 0.2 terminal secondary amino groups in one molecule, wherein said product(C) is obtained by reacting a compound(e) having an organic group(II) having a number average molecular weight of 100-25000 selected from the group consisting of amino and acryloyl groups, with a compound(f) being capable of reacting with said organic group(II) to form a secondary amine compound;

reacting the polyisocyanate compound (compound(d)), with the compound selected from the group consisting of: a polyol compound (compound(c)), a polythiol compound

(compound(c-1)), and a compound (product(C)), in order to produce a (thio)urethane pre-polymer (product(B)) having a terminal isocyanate group, the content of which is in an amount of 4 % or less by weight of said product(B); and

reacting said product(A) with said product(B) in such a proportion to produce a urethane resin having no isocyanate group,

wherein said compound (a) includes N- β (aminoethyl)
 γ -aminopropylmethyldimethoxysilane, said compound (b) includes 2-ethylhexyl acrylate, said compound (c) includes polyether polyol, and said compound (d) includes 4,4'-diphenylmethanediisocyanate.